ABSTRACT OF THE DISCLOSURE

the gear characteristic value set in a characteristic setting section does not take into account preventing oscillation, a calculating section simulates an oscillation that is caused in the final gear of the gear driving system, based on the gear characteristic value set in the characteristic setting section. A comparing section judges whether or not the frequency and amplitude of the oscillation in this oscillation system obtained by the simulation fall within an acceptable range. If the value does not fall within the acceptable range, a characteristic the setting of the gear changing section changes characteristic value, and the processes of the calculating section and the comparing section are repeated. The processes of the characteristic changing section, the calculating section, and the comparing section repeated until the comparing section judges that the frequency or amplitude of the oscillation in the osculation system falls within the acceptable range. As a result, a gear driving system is designed in which oscillation is suppressed.